

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match.
The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.
Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

12.48 TR-4 55 Degree Line Scattering Foil Loading

Text Pages 2 through 3

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Approved: _____ ***Signature on File*** _____
Collider-Accelerator Department Chairman Date

M. Wiplich

12.48 TR-4 55 Degree Line Scattering Foil Loading

1. Purpose

The purpose of this procedure is to define the sequence of activities required to load scattering foils into the diagnostic chamber in the 55 degree line.

2. Responsibilities

It is the responsibility of the person or persons executing this procedure to observe all safety rules.

3. Prerequisites

3.1 Tandem Operator training

4. Precautions

None

5. Procedure

Checklist (when indicated by “___”, initial step upon completion)

- 5.1 ___ Shut image gate valve.
- 5.2 ___ Shut hand valve in front of diagnostic chamber in 55 degree line.
- 5.3 ___ Shut wall valve in TR-4 in 55 degree line.
- 5.4 ___ Vent line very slowly using nitrogen. This needs to be done carefully to protect remaining usable foils.
- 5.5 ___ When line has reached atmospheric pressure, remove the foil holder from the diagnostic chamber.
- 5.6 ___ Carefully remove foils that are to be replaced.
- 5.7 ___ Load new foils into the foil holder.
- 5.8 ___ Carefully replace the foil holder in the diagnostic chamber.
- 5.9 ___ Very slowly, pump out the diagnostic chamber and section of beam line.
 - 5.9.1 ___ Start with the pump valve off.
 - 5.9.2 ___ Slowly open the pumping valve until the pump pressure spoils a

little (250 - 300 microns).

5.9.3 _____ Let the pump work until the pressure is again as low as possible.

5.9.4 _____ Crack the valve some more and again bring the pressure up to the 250 - 300 micron range.

5.9.5 _____ Repeat steps 5.9.2 to 5.9.4 until the beam line pressure is as low as possible with the pump valve wide open.

5.10 _____ While pumping is being done update the card containing the list of foils on the beam line and the corresponding card in the control room.

5.11 _____ After pumping is completed, close the hand valve on pumping port and then open the hand valve to the switcher.

5.12 _____ Let switcher pump on box and recover.

5.13 _____ Finally open wall valve in TR-4.

6. Documentation

None

7. References

None

8. Attachments

None